APPENDIX 4. 2001 SEMINARS

LABORATORY FOR ATMOSPHERES SEMINAR SERIES

Dr. Peter Lyster, University of Maryland Earth System Science Interdisciplinary Center, "High Performance Computing and Kalman Filter Development for Data Assimilation," January 9.

Dr. Mian Chin, Virginia Tech—Visiting Scientist w/Code 916, "Tropospheric Aerosol Composition and Radiative Forcing: A Global Model Study," January 22.

Dr. Francisco Valero, Scripps Institution of Oceanography, "Triana: The First Deep Space Climate Observatory," February 6.

Dr. Siegfried D. Schubert, NASA Goddard Space Flight Center, "Are Droughts and Floods Predictable on Seasonal and Longer Time Scales?" February 20.

Dr. Richard E. Carbone, National Center for Atmospheric Research, "Inferences of Predictability Associated with Warm Season Precipitation Episodes in North America," March 6.

Dr. Bernard Marty, Centre de Recherches Petrographiques et Geochimiques, "Nitrogen Isotope Heterogeneity in the Solar System: Solar Versus Planetary," March 20.

Professor Leonard J. Pietrafesa, North Carolina State University, "Wind-Driven Coastal Ocean Circulation Simulated by Using a Coupled Wave-Current Modeling System," April 3.

Dr. Jay Herman, NASA Goddard Space Flight Center, "Triana: Earth Science from Deep Space," April 17.

Dr. Michael King, NASA Goddard Space Flight Center, "Remote Sensing of Smoke, Land, and Clouds During the SAFARI 2000 Experiment in Southern Africa," May 1.

Professor Robert Pepin, University of Minnesota, "On the Isotopic Composition of Primordial Xenon in Terrestrial Planet Atmospheres," May 15.

Dr. Winston Chao, NASA Goddard Space Flight Center, "ITCZ, Monsoon, and Monsoon Onset: Toward an Interpretation of Tropical Large-Scale Rainfall Patterns," May 22.

SOUNDER RESEARCH TEAM

Dr. Amita Mehta, JCET, "Variability of Global Water Vapor Observed from Satellite Measurements," Department of Geography, University of Maryland Baltimore County, April 13.

Dr. Chris Barnet, "Passive Remote Sensing of CO_2 (and other trace gases)," 2001 GEST Graduate Summer Program, NASA GSFC, Greenbelt, Md., June 7.

DATA ASSIMILATION OFFICE

Mark Leidner, Atmospheric and Environmental Research, Inc., "Use of NASA SeaWinds Scatterometer Data at ECMWF," January 3.

Peter Lyster, DAO and Univ. of Maryland Earth System Science Interdisciplinary Center, "High Performance Computing and Kalman Filter Development for Data Assimilation," January 9.

Ricky Rood, DAO, "Evaluation of Upper Tropospheric and Lower Stratospheric Ozone Profiles From a Global Ozone Data Assimilation System," January 12.

Kikuro Miyakoda, George Mason University, "Analysis of the Connection From the South Asia Monsoon to ENSO by Using Precipitation and Circulation Indices," January 23.

Steven Pawson, DAO, "Does the 11-year Solar Cycle Really Influence the Lower Stratosphere? A Review of Some Observations and a Look at Some New Model Studies From GRIPS," February 2.

Ricky Rood, DAO, chaired a White House OSTP Working Group on Climate Modeling and will regale us with "inside" stories from his summer at the White House, February 15.

Siegfried Schubert, DAO, "Are Droughts and Floods Predictable on Seasonal and Longer Time Scales?" February 20.

Group presentation led by Larry Coy, "Performance of fvDAS in the Stratosphere: Meteorology," February 23.

Group presentation led by Susan Strahan, "Performance of fvDAS.1 in the Stratosphere: Transport," March 9.

Robert Ciotti, NAS, "Recent Developments on the fvDAS Optimization at NAS," March 15.

Ronald M. Errico, NCAR, "The Problem of Developing Adjoints of Model Physics," March 26.

Bob Hudson, UMCP, "Separation of the Total Ozone Field at Mid-Latitudes by Meteorological Regime," March 30.

Tonushree Kundu, Dept. of Mechanical Engineering, Univ. of Calif., Berkeley, "The Creation of Large-Scale Zonal Flows and Eddies From Small-Scale Forcing," April 3.

Pat Pauley, Naval Research Lab, "Operational Aircraft Data for Numerical Weather Prediction—Characteristics and Quality Control," April 26.

Keiji Tani, Japan Atomic Energy Research Institute, presents "Earth Simulator System," May 31.

Jean-Noel Thepaut, Niels Bormann, Christina Kopken, ECMWF, "Assimilation of Satellite Data in the ECMWF 4-D VAR System," June 19.

S.J. Lord, M. Masutani, J.S. Woollen, J.C. Derber, (NOAA/NWS/NCEP/EMC), R. Atlas, J. Terry (NASA GSFC/DAO), G.D. Emmitt, S.A. Wood, S. Greco, (Simpson Weather Associates), "Observing Systems Simulation Experiments for NPOESS," July 12.

David Lary, University of Cambridge, UK, "Chemical Data Assimilation: Satellite Validation and Optimum Observation System Design," Special Seminar, July 24.

Mohan Gupta, Electric Power Research Institute (EPRI), Palo Alto, California, "Atmospheric Simulations of Radon: Regional Sources," GEST seminar, July 27.

Paul Poli, JCET, (DAO) "GPS: Climate Modelling and Forecast Skill," Joint Center, EMC series, August 13.

Adrian Simmons, Environmental Modeling Center, NOAA, "Some Aspects of the Recent Improvement of Skill of NWP," EMC seminar, August 13.

Jean Thiebaux, NOAA, "New Sea-Surface Temperature Analysis Implemented at NCEP," DAO seminar, September 4.

Martin Mueller, Center for Solar Energy and Hydrogen Research (ZSW), Stuttgart, Germany, "Real-Time Total Ozone and Ozone Profiles from TOVS and GOME Data Using Neural Networks," September 7.

Ross Hoffman, Atmospheric and Environmental Research, Inc. "Applications of Feature Calibration and Alignment," DAO seminar, October 10.

Ken Holmlund, EUMETSAT, "Generation and Utilisation of Quality Indicators for Satellite-Derived Atmospheric Motion Vectors," DAO Seminar, October 11.

Ian Folkins, Dalhousie University, "Tropical Convection and Ozone," Fridays Seminar Series, October 12.

Daiwen Kang, North Carolina State University, "Non-Methane Hydrocarbons and Ozone in the Rural Southeast United States National Parks: A Model Sensitivity Analysis and Its Comparison With Measurement," Fridays Seminar Series, October 12.

Mike Kalb, OGST, "Infrastructure Requirement for Weather Forecasting in 2025," DAO Special Seminar, October 16.

X.-P. Tom Zhao, CIRA/CSU visiting scientist at NOAA/NESDIS/ORA, "AVHRR Aerosol Retrieval, Products, and Validation," October 17.

Michael Fox-Rabinovitz, ESSIC, "Simulation and Data Assimilation of Anomalous Regional Climate Events With the GEOS Stretched-Grid (SG) GCM and SG-DAS," DAO Seminar, October 26.

Pete Colarco, University of Colorado, "Determining the UV Imaginary Index of Refraction and Single Scatter Albedo of Saharan Dust Using EP-TOMS Data and a Three-Dimensional Dust Transport Model," November 5.

Ron Errico, National Center for Atmospheric Research to discuss ongoing and future work with the DAO, "Adjoint Model Development and NCAR-DAO Collaborative Work in Predictability Research Related to Data Assimilation," November 8.

Hiroo Hayashi, from NIES in Tsukuba, Japan, "An Observational Study of Inertial Instability in the Equatorial Middle Atmosphere," November 16.

Wei Wu Tan, NY University at Stony Brook, "A Comparison of Lower-Stratospheric Subtropical Transport Between GEOS-DAS and GEOS-GCM," November 19.

Angela Benedetti, Colorado State University, "Toward Assimilation of Cloud Radar Data for Improvements in Mesoscale Forecasts," November 19.

Tijana Janjic, Institut fur Physik, Universitat Hohenheim, "Error Due to Unresolved Scales in Estimation Problems for Atmospheric Data Assimilation," Dec. 3 and Dec 7.

MESOSCALE ATMOSPHERIC PROCESSES BRANCH

V. Chandrasekar, Colorado State University, "TRMM Precipitation Radar: Attenuation Estimation, Cross-Validation of Underlying Physical Models and Cross-Calibration of Radars," January 8.

Andrew Heymsfield, "Observations and Parameterizations of Tropical Stratiform Particle Size Distributions: Results From TRMM Field Campaign," January 22.

Eyal Amitai, UMBC/JCET, "Rainfall Studies for the TRMM Validation Program," Microwave Sensors Branch Seminar, Laboratory for Hydrospheric Processes, February 20.

Sergey Y. Matrosov, University of Colorado, "X-Band Radar Polarimetric Studies of Rainfall at NOAA ETL," March 12.

Ralf Bennartz, University of Kansas, "Active and Passive Microwave Response to Ice Particle Size Distributions," March 20.

Lihua Li, University of Massachusetts at Amherst, "Millimeter-Wave Cloud Radars and Their Application in Atmospheric Attenuation Retrieval," April 27.

Eric A., Smith, NASA GSFC, "Synopsis of Global Precipitation Mission Development," May 9.

Jeffrey L. Stith, Research Aviation Facility, "Microphysical Observations of Tropical Clouds," May 23.

David Parsons, NCAR, "A New Look at an Old Problem: An Explanation for the Diurnal Cycle of Rainfall over Tropical Oceans," May 24.

Robert Pasken, Saint Louis University, "Investigations of TOGA COARE Convection Using Long Dual Doppler Baseline Techniques," June 11.

Steven Sherwood, Yale University, "Aerosols, Cumulonimbus, and Water Vapor in the UT/LS," June 12.

Philip R. A. Brown, Cloud Physics Research, U.K. Meteorological Office, "Ice Nucleation in Lee-Wave Clouds: Observations and Numerical Modelling Studies From the Intacc Field Campaign," June 29.

David Atlas, "Anatomy of a Tropical Thunderstorm: A Synthesis of Observations During LBA," Distinguished Visiting Scientist, Goddard Space Flight Center, October 11.

Judd Welton, UMBC/GEST Center, "Overview of the Micro Pulse Lidar Worldwide Observation Network (MPL-Net)," November 7.

Dr. Guojun Gu, Columbia University, "Synoptic-Scale Convective Components of the ITCZ," Goddard Visitor Center Auditorium, December 6.

CLIMATE AND RADIATION BRANCH

Scott Curtis, Univ. of Maryland (JCET), Code 912, "Extending Our Understanding of ENSO, Monsoons, and Climate Change Through Global Observations of Precipitation," January 10.

In-Sik Kang, Seoul National University, "Impacts of Cloud-Radiation Interaction in AGCM Simulations of Tropical ISO," January 24.

Jiayu Zhou, EITI, Climate and Radiation Branch, NASA/GSFC, "Contribution to Understanding South American Summer Monsoon System Climatology, Variability, Simulation and Predictability," January 24.

David Thompson, Colorado State University, "Regional Climate Impacts of the Arctic Oscillation and Associated Climate Trends," February 28.

V. Ramaswamy, NOAA/GFDL, "Quantifying the Radiative Forcing of Global Climate Change and Its Implications," March 28.

Michael Mishchenko, NASA, Goddard Institute for Space Studies, "Retrievals of Aerosol and Cloud Particle Microphysics Using Polarization and Depolarization Techniques," April 11.

Shian-Jiann Lin, NASA/Goddard Space Flight Center, "The Research and Development of the Finite-volume Community Climate Model (fvCCM) and Its Applications in Data Assimilation and Numerical Weather Predictions," April 25.

Kerry H. Cook, Department of Earth and Atmospheric Sciences, Cornell University, "Mechanisms of Tropical Precipitation Variability: Case Studies for Africa," May 16.

John Roads, Scripps Institution of Oceanography, "Global Water and Energy Budgets," May 23.

Stephen Klein, Geophysical Fluid Dynamics Laboratory/NOAA, "A Parameterization of the Statistical Moments of Total Water for Large-Scale Models," June 13.

Christopher Cattrall, University of South Florida, "Retrieval of Columnar Aerosol Phase Function and Single-Scattering Albedo From Sky Radiance over the Ocean: Measurements of African Dust," September 5.

H. Moyses Nussenzveig, Federal University of Rio de Janeiro, "Mie Resonances and Cloud Absorption," September 19.

Kingtse Mo, Climate Prediction Center/NOAA, "Impact of Soil Moisture on the North American Monsoon Systems," October 3.

Christina Hsu, UMBC/GEST, "Satellite Characterization of Tropospheric Aerosols During ACE–Asia," October 3.

Stuart Piketh, University of Witwatersrand, "Special Seminar," October 10.

John Reagan, University of Arizona, "Toward Establishing an Aerosol Extinction-to-Backscatter Climatology," October 16.

Zhanqing Li, U of M Department of Meteorology and Earth System Science Interdisciplinary Center, "Remote Sensing of Cloud, Aerosol and Radiation and Understanding Their Interactions," October 17.

Alexander Ignatov, NOAA, "Aerosols from AVHRR: Signal, Errors, Information Content," October 17.

Paul Ginoux, Georgia Tech, "Simulations of Global Transport and Deposition of Mineral Dust with the GOCART Model, and Applications to Climate and Biogeochemical Processes," October 31.

Russell R. Dickerson, University of Maryland, "Black Carbon: Global Budget and Impacts on Climate," November 7.

Alexander Smirnov, Science Systems and Applications, Inc., "Aeronet Results," November 14.

Alexander Marshak, UMBC/Joint Center for Earth Systems Technology, "A Correct Treatment of Large Droplets in Radiative Transfer and Its Effect on Cloud Absorption," November 28.

William D. Collins, National Center for Atmospheric Research, "Modeling Aerosols with Assimilation of Observations," November 28.

Robert F. Cahalan, NASA/Goddard Space Flight Center, "Satellite Observations of Solar Irradiance and Sun-Climate Impacts," December 5.

Judd Welton, UMBC/GEST Center, "Aerosol Observations Using the Micro Pulse Lidar Network (MPL-Net)," December 5.

Brian Cairns, Columbia University and NASA/Goddard Institute for Space Studies, "Using and Abusing Polarization," December 20.

ATMOSPHERIC EXPERIMENT BRANCH

Dr. Bernard Marty, NASA GSFC/Centre de Recherches Petrographiques Geochimiques (CRPG), "Nitrogen Isotope Heterogeneity In The Solar System: Solar Versus Planetary," March 20.

Prof. Robert Pepin, NASA GSFC/University of Minnesota, "On The Isotopic Composition of Primordial Xenon in Terrestrial Planet Atmospheres," May 15.

ATMOSPHERIC CHEMISTRY AND DYNAMICS BRANCH

Mian Chin, NASA GSFC/Georgia Tech, "Tropospheric Aerosol Composition and Radiative Forcing: A Global Model Study," January 22.

Omar Torres, NASA GSFC/JCET, "A New Tool for Measuring Aerosol Properties From Space: The Near UV Method," January 31.

Clark Weaver, NASA GSFC/Caelum Corporation, "Radiative Forcing of Saharan Dust. GOCART Model Simulations Compared with ERBE Data," February 28.

Anne Thompson, NASA GSFC, "Studies of TOMS Smoke Aerosol and Tropospheric Ozone in the Tropics," March 14.

Brooke Hemming, EPA, "Thermodynamics of Aerosol-Phase Atmospheric Organics: Temperature and Humidity Effects," April 6.

Anne Thompson, NASA GSFC, "Tracking Pollution from Space," Emory University, Atlanta, Georgia, April 9.

Jun Ma, NASA GSFC/Johns Hopkins University, "Model Measurement Comparison With Modified Lagrangian Mean Diagnostics," April 13.

Jay Herman, NASA GSFC, "Earth Observations from Lagrange Points—Triana and Beyond," April 17.

Bill Stockwell, Desert Research Institute (Nevada), "Coupling Atmospheric Chemistry With a Convective Boundary Layer Model," April 20.

Alan R. Bandy, Drexel University, "Determination of Scalar Fluxes using Eddy Correlation and Isotope Dilution Atmospheric Pressure Ionization Mass Spectrometry," June 20.

Mian Chin, NASA GSFC/Georgia Tech, "Model-Measurement Comparisons From Our Recently Submitted JAS Paper (GOCART Model Simulated AOT and Comparisons with TOMS, AVHRR, AERONET) and Model Support for the Recent ACE–Asia Mission," June 20.

Mohan Gupta, Electric Power Research Institute (Palo Alto, CA), "Atmospheric Simulations of Radon: Characterization of Regional Sources," July 27.

James W. Elkins, NOAA/CMDL, Boulder, Colorado, "Source Gas Emissions along the Trans-Siberian Railway During the Summer of 2001," August 31.

Ian Folkins, Dalhousie University, Canada, "Tropical Convection and Ozone," October 12.

Jorg Gumbel, USRA, NAVAL Research Laboratory, "The Coupling of Ion Chemistry and Ice Particles Near the Summer Mesopause," October 18.

Andreas Behrendt, Radio Science Center for Space and Atmosphere (RASC), Kyoto University, Japan, "Combined Elastic Pure-Rotational Raman Lidar for the Measurement of Temperature and Optical Particle Properties: Design and Performance of the RASC Raman Lidar at Shigaraki (34.8° N, 136.1° E), Japan," October 24.

David H. Rind, NASA Goddard Institute for Space Studies, "Global Climate Benchmarks: Data to Test Climate Models," November 7.

Edward C. DeFabo, George Washington University, "Potential Impacts on Human Health and the Biosphere From Increased UV-b Radiation Associated with Stratospheric Ozone Depletion," December 5.

Warwick Norton, Oxford University, "Dynamics and Tracer Transport in the Tropical Lower Stratosphere," December 11.